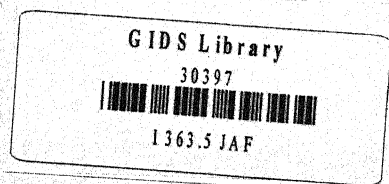


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HOUSING IN INDIA : AN ANALYTICAL APPROACH TO QUALITY OF LIVING

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1. INTRODUCTION

In India the rapid rate of population growth with 30 per cent population living below poverty line side-tracks the planners to seriously undertake within the given budget the next most important requirement of humanity, i.e., housing. The result is that India has worst condition of housing among the third-world countries. The size of the household varies from one state to another and accordingly the size of dwelling is required. The average size of household in rural India is 5.58 whereas in urban it is 5.34 (Total = 5.52). The average size of household of Haryana is 6.30 which is highest when the lowest average is in Chandigarh, i.e. 4.38.

In India as a whole only 30.96 per cent rural and 73.19 per cent urban households occupy pucca houses. According to the definition of 'Census of India (1991)'¹ a pucca house is one of which the predominant material of wall and roof are as given below :

Wall : Burnt bricks, GI sheets, or other metal sheets, stone, Cement, concrete, etc.

Roof : Tiles, slate, corrugated iron, zinc or other metal or asbestos cement sheet, bricks, limestone, RRC/RCC, etc.

1. Census of India, 1991, Houses and Household Amenities, Series I, Part VII.

Housing is important for development in both economic and welfare terms.² After food, housing is typically the largest item of household expenditure for poor families, and that they are willing to go to great lengths to obtain housing at locations with access to employment, even if this means incurring the risks of illegal 'squatting'.³ In Calcutta, an estimated 6 lakh peoples sleep on the pavements and in Bombay about one lakh do so. Although street sleeping permits no family life, no privacy, no relief from heat, no escape from cold or rain and no disposal of waste.⁴ Due to absence of family life it is estimated that in Calcutta and Bombay about 100,000 prostitutes are operating in each of the city with rapid rise in HIV/AIDS cases. In India due to an explosive increase in population, low income levels, low rate of addition to the housing stock, inadequate maintenance of the existing housing stock, etc. the housing problem has been assuming more and more alarming proportions.

Bar-diagram shows that the rural and urban housing condition is quite correlated with monthly per capita expenditure class. For example the households coming under highest the monthly per capita expenditure class of Rs.385 and above have no katcha dwellings and only less than 10 per

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2. World Bank, 1975, Housing : Sector Policy Paper, Washington, p.3
 3. World Bank, 1975, Housing : Sector Policy Paper, Washington, p.2
 4. Charles Abrams, 1966, Housing in the Modern World, London, p.1.

cent dwellings are semi-pucca, both in rural and urban areas. Whereas the households with least monthly per capita expenditure class of less than Rs.65 have about 70 per cent kutcha dwellings and have no pucca dwelling in rural and about 48 per cent kutcha and only 20 per cent pucca dwellings in urban areas. Similarly the per capita covered area in m^2 is highest among the highest monthly per capita expenditure class, which is 16.2 and 22.5 m^2 in rural and urban areas respectively. When the covered area is least, i.e. 3.9 m^2 and 4.6 m^2 in rural and urban areas of least monthly per capita expenditure class.

In many cities about 20-40 per cent of the people are living in squatters, "from one to two-thirds of Asian cities population must be considered to live in slums."⁵ According to a World Bank paper many big cities are experiencing shanty town population growth in excess of 20 per cent a year and a doubling of slum and shanty town population within the next four to six years is now in prospect.⁶ Low GNP and maldistribution of income, even with welfare measures, there would not be enough resources to abolish slums.⁷

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5. Intervention Union of Local Authorities, 1975, New Patterns of Urbanisation, The Hague : IULA, p.16.
 6. World Bank, 1979, Urbanisation : Sector Working Paper, Washington.
 7. M.H. Gopal, 1979, "Slums in India : An Approach", in P.R. Brahmananda, et.al (ed.), Indian Economic Development and Policy, New Delhi.

Table 1 : Percentage of Households Unable to Afford the Cheapest Dwellings Available

City	Percentage
Ahmedabad	64.0
Madras	63.0
Mexico City	55.0
Hong Kong	35.0
Nairobi	68.0
Bagota	47.0

Source : World Bank, 1975, Housing : Sector Policy Paper, Washington, p.14.

According to the estimates of the Planning Commission, about 37 per cent of the population in India was below the poverty line in 1985. A large percentage of the population above the poverty line also cannot afford to acquire houses as they can hardly have any significant saving because of low income (Table 1). Local authorities insist on maintaining high standards which raise the cost of housing and prohibit self-help construction by low income families, which is mostly a failure (Table 2). Thus illegal housing and squatter colonies became the predominant source of new housing in many cities. Until the 1970s government tended to concentrate on the provision of heavily subsidised housing, but later on

Table 2 : Population in Slums and Squatter and Annual Growth Rate

Country	City	Year	Annual Growth Rate		Slum & squatt-ers pop. as % of city population	City Pop. as % of Total urban Population of the country
			City Pop.	Slum & Squatter's Population		
India	Bombay	1971	3.6	17.4	45	5
	Calcutta	1971	2.5	9.1	67	7
Indonesia	Jakarta	1972	4.2	4.6	26	20
Korea Rep.	Seoul	1969	6.7	56.6	29	39
Pakistan	Karachi	1971	5.6	10.0	23	23
Turkey	Ankara	1970	5.0	9.5	60	9

Source : U.N. Compendium of Social Statistics, 1977.

the high building standards and zoning regulations were laid down in order to improve quality. In this process local authorities demolished slums and squatters which in no time occupied other localities in absence of any source of housing. Charles Abrahams, the authority on housing subject argued that all prevailing ideas of wholesale slum clearance and building of costly housing must be abandoned. Authorities should provide only sites and services and allow the owners to build their own houses as per their means and choice. Table 3 of housing situation in few countries would give an overall view for future planning.

Table 3 : Housing Situation in Few Countries

Country	Year	Average size of persons per HH	Owner occupied	Average No. of rooms per housing unit	Average No. of persons per room	Urban Areas % of Houses with		
						Piped water	Flush toilet	Electric light
India	1971*	5.6	84.6	2.0	2.8	-	-	-
	1983**	5.6	83.0	2.2	2.7	21.0	9.0	28.0
Bangladesh	1973*	5.9	92.4	2.0	2.9	-	-	-
	1983**	6.1	91.0	-	-	-	-	-
Egypt	1976*	5.2	-	-	1.8	-	-	-
	1983**	5.1	-	3.5	1.4	60.0	33.0	65.0
Japan	1978*	3.5	57.8	-	-	-	-	-
	1983**	3.4	63.0	4.2	0.6	95.0	48.0	99.0
Israel	1978*	3.7	70.6	2.9	1.2	-	-	-
	1983**	3.9	72.0	2.6	1.3	99.0	98.0	99.0
Australia	1976*	3.1	66.7	5.4	0.6	-	-	-
	1983**	3.0	74.0	4.9	0.5	99.0	98.0	99.0
Canada	1976*	3.2	61.8	5.4	0.6	-	-	-
	1983**	2.4	64.0	5.6	0.5	99.0	99.0	99.0

Source : * UN Statistical Year Book, 1976, 1977 and 1978.

** International Marketing Data and Statistics, 1987-88
12th Edition, Euromonitor Publications Ltd., 1987.

2. OWNERSHIP OF RESIDENTIAL HOUSES

The above table shows that the ownership in advanced countries is much less like in Japan 57.8 per cent, Canada 61.8 per cent and Australia 66.7 per cent, whereas in Bangladesh and India it is 92.4 and 86.2 per cent respectively which is too high. It indicates that in advanced countries housing is considered as an industry, whereas in developing countries it is still an individual's responsibility. In India also if housing is also declared as an industry, it may solve the housing problem upto a major extent, where people may go for a lease in the competitive market. In some of the states and Union Territories the proportion of ownership is much less in comparison to national average, are Chandigarh 46.0 per cent, Andaman and Nicobars 59.2 per cent, Delhi 66.1 per cent and Arunachal Pradesh 67.3 per cent. Here Chandigarh and Delhi are predominantly urban, therefore, upto certain extent industrialisation aspect of housing prevails like the overall situation of urban India, i.e. 65.6 per cent ownership. In Andaman and Nicobars and Arunachal Pradesh, situation is different, as they are the sensitive areas and government has provided the housing facility to its employees upto a large extent. In the states and Union Territories where percentage of urban house ownership is significantly low as Arunachal Pradesh 22.9, Sikkim 23.1, Mizoram 37.4, Andaman and Nicobars 39.1, Meghalaya 41.9, Chandigarh 45.7, Himachal Pradesh 48.1, Tamil Nadu 54.2 and West Bengal 54.5. Most of these states/

Union Territories are important areas for Central or State Governments, either due to security reasons or some other reasons, therefore, their employees are provided the government accommodations.

3. CONDITION OF RESIDENCE

3.1 Households by Flood Risk of Building

Table 4 shows that in India due to improper drainage system and torrential rains about 18.5 per cent rural and 13.1 per cent urban households suffer by flood risk of their buildings. In such condition buildings need expensive repairing and their longevity is reduced. States/Union Territories where more than one-fifth households suffer with flood risk of their buildings are Assam 49.0 R and 25.8 U per cent, Bihar 37.1 R, Manipur 27.8 R, 31.3 U, Punjab 29.3 R, 22.3 U, Uttar Pradesh 23.8 R and West Bengal 34.7 R, 20.3 U per cent. There is no State/Union Territories where more or less houses are not affected by flood.

3.2 Households by No Approach Road

In India there are households without any approach road to their buildings. According to Table 4, in rural areas such households are 37.5 per cent, whereas in urban areas they are 17.7 per cent. There are States/Union Territories where more than half of the households are deprived without

R = Rural; U = Urban

Table 4 : Households by Flood Risk of Building and With No Approach Road

State/Union Territories	Percentage Distribution of HH by Flood Risk of Building		Percentage Distribution of HH by No Approach Road to Building	
	R	U	R	U
Andhra Pradesh	16.3	13.8	29.1	16.6
Assam	49.0	25.8	34.5	17.0
Bihar	37.1	15.0	46.7	25.9
Gujarat	10.4	8.5	37.8	12.7
Haryana	6.9	15.8	3.7	1.7
Himachal Pradesh	10.0	4.5	71.6	22.7
Jammu & Kashmir	16.8	11.4	57.5	17.4
Karnataka	6.6	9.5	31.1	21.2
Kerala	8.8	11.5	49.8	32.6
Madhya Pradesh	5.0	6.7	48.2	17.1
Maharashtra	6.5	12.3	32.6	24.4
Manipur	27.8	31.1	40.7	26.0
Meghalaya	3.1	4.8	63.9	21.4
Nagaland	-	3.9	-	47.1
Orissa	18.1	12.5	17.7	21.8
Punjab	29.3	22.3	16.8	10.7
Rajasthan	6.8	7.0	12.1	11.2
Sikkim	0.7	-	76.1	37.6
Tamil Nadu	11.4	14.5	26.7	16.9
Tripura	6.8	19.1	45.1	18.4
Uttar Pradesh	23.8	12.3	42.3	15.9
West Bengal	24.7	20.3	36.0	16.4
Andaman & Nicobar	9.3	5.2	30.3	20.0
Arunachal Pradesh	6.7	13.8	53.9	17.3
Chandigarh	5.7	-	22.0	2.7
Dadar & Nagar Haveli	0.9	-	65.7	28.4
Delhi	-	14.7	3.6	6.8
Goa	-	0.7	60.2	44.7
Lakshadweep	15.7	11.4	56.6	57.7
Mizoram	1.7	1.1	53.5	36.8
Pondicherry	16.3	11.5	21.4	21.6
Daman & Diu	9.9	9.6	9.7	8.4
All India	18.5	13.1	37.5	17.7

Source : Sarvekshna, 52nd Issue, Vol.XVI, No.1, July-September, 1992, NSS - 43rd Round (Surveyed in July 1987 - June 1988).

an approach road. They are Sikkim 76.1 R, 37.6 U per cent, Dadar and Nagar Haveli 65.7 R, 28.4 U, Meghalaya 63.9 R, 21.4 U, Goa 60.2 R, 44.7 U, Jammu and Kashmir 57.5 R, 17.4 U, Lakshadweep 56.6 R, 57.7 U, Arunachal Pradesh 53.9 R, 17.3 U, and Mizoram 53.5 R, 36.8 U per cent.

3.3 Living in Slum/Bustee Areas

According to NSS Table 3 in India about 6.3 per cent households of rural and 14.7 per cent of urban live in slum/bustee areas and out of which 47.0 and 2.60 per cent live in katcha structures in rural and urban areas respectively.

In rural India there are States/UTs where more than one-tenth households live in slum/bustee areas, i.e. Arunachal Pradesh 48.6 per cent, Pondicherry 28.9, Assam 15.0, Maharashtra 12.5, Manipur 10.6 and Mizoram 10.2. There are several States/UTs where slum/bustee dwellers in urban areas are quite high, the important one are Pondicherry 29.2 per cent, Maharashtra 25.4, Orissa 19.1, Andhra Pradesh 18.2, West Bengal 17.6, Karnataka 16.9, Chandigarh 16.5 and Bihar 15.7. Delhi being the capita of the country, it is estimated that not less than one-fifth of its population lives in slum/bustee areas. There are several reasons of slums/bustees, i.e. (i) rampant poverty; (ii) wrong housing policies/planning and no innovation for housing materials in alluvial plains; (iii) uncontrolled migration in urban areas due to external poverty.

Table 5 : Households Living in Slum/Bustee Areas and Their Proportion Living in Katcha Structures

State/Union Territories	RURAL		URBAN	
	Percentage of HH Living in Slum/Bustee Areas	Percentage of Slum/Bustee Dwellers living in katcha structures	Percentage of HH Living in Slum/Bustee Areas	Percentage of Slum/Bustee Dwellers living in katcha structures
Andhra Pradesh	6.7	65.1	18.2	48.0
Assam	15.0	73.0	12.0	66.6
Bihar	6.8	53.3	15.7	36.6
Gujarat	4.7	15.1	10.9	15.9
Haryana	2.0	15.3	4.9	19.2
Himachal Pradesh	5.4	5.9	4.3	13.7
Jammu & Kashmir	2.2	12.2	2.6	1.6
Karnataka	7.4	41.1	16.9	26.6
Kerala	1.7	28.2	4.3	20.1
Madhya Pradesh	8.1	22.3	18.1	20.5
Maharashtra	12.5	26.7	25.4	14.0
Manipur	10.6	82.4	3.1	80.8
Meghalaya	5.0	58.1	5.0	42.4
Nagaland	-	-	0.4	-
Orissa	6.4	79.5	19.1	49.9
Punjab	3.5	20.8	6.3	8.8
Rajasthan	5.4	39.7	8.1	16.8
Sikkim	7.6	9.6	0.6	-
Tamil Nadu	6.3	62.4	9.2	58.8
Tripura	8.9	80.0	8.3	26.1
Uttar Pradesh	3.7	50.6	9.5	26.3
West Bengal	4.0	71.9	17.6	13.6
Andaman & Nicobar	1.0	-	3.7	19.1
Arunachal Pradesh	48.6	96.0	16.5	71.7
Chandigarh	N.A.	N.A.	N.A.	N.A.
Dadar & Nagar Haveli	5.2	23.1	11.2	-
Delhi	N.A.	N.A.	N.A.	N.A.
Goa	-	-	7.1	28.1
Lakshadweep	1.1	-	1.1	-
Mizoram	10.2	79.1	2.8	-
Pondicherry	28.9	73.1	29.2	88.1
Daman & Diu	-	-	-	-
All India	6.3	47.0	14.7	26.0

Source : Sarvekshna, 52nd Issue, Vol.XVI, No.1, July-September, 1992, NSS - 43rd Round (Surveyed in July 1987 - June 1988).

3.4 Quality of Houses

As per definition of pucca houses by the Census of India as mentioned earlier, India has 30.96 per cent rural and 73.19 per cent urban houses as pucca.⁸ Among some of the states/UTs the situation in rural areas is worst where pucca houses are even less than 15 per cent i.e. Tripura 1.99, Manipur 4.36, Nagaland 8.39, Andaman and Nicobars 8.84, Assam 10.90, Meghalaya 12.08, Arunachal Pradesh 12.25 and Orissa 13.52. There are also few states/UTs where rural pucca houses are above 45 per cent i.e. Delhi 86.88, Lakshadweep 83.91, Punjab 72.23, Daman and Diu 71.23, Chandigarh 58.79, Kerala 51.80, Himachal Pradesh 49.88 and Rajasthan 47.28. Rural areas of Delhi and Chandigarh are almost the part of the greater metropolitan system whereas Punjab, Kerala, Lakshadweep and Daman and Diu are the most affluent states/UTs in India. Himachal Pradesh and Rajasthan states are gifted with the abundance of natural wealth of stones for pucca houses.

Out of 32 States/UTs, 11 States/UTs have more than 75 per cent urban houses as pucca, i.e. Daman & Diu 99.7, Lakshadweep 92.86, Punjab 88.26, Rajasthan 86.47, Chandigarh 85.70, Gujarat 81.27, Himachal Pradesh 79.38, Sikkim 78.68, Maharashtra 78.55 and U.P. 76.31 per cent. There are 9 States/UTs where urban houses are less than 60 per cent pucca

8. Ibid.

houses, i.e. Pondicherry 57.12, Orissa 55.93, Andhra Pradesh 54.30, Arunachal Pradesh 52.78, Assam 44.76, Nagaland 38.85, Tripura 24.21, Manipur 20.94 and Andaman and Nicobars 18.17 per cent.

4. SIZE OF ACCOMMODATION

4.1 Covered Area

We can get the idea of size of accommodation by NSS based Table 6, i.e., per capita covered area in square metres. In India average per capita covered area in rural and urban areas are 34.8 m^2 and 9.4 m^2 respectively. The highest average per capita covered area available in kutcha houses is 39.2 m^2 than in semi-pucca 33.9 and pucca houses 26.3 in rural areas. Contrary to it, in urban areas the average per capita size of covered area is comparatively more in pucca house 10.9 m^2 than in semi-pucca 7.6 and kutcha 6.8 houses. This indicates that the households living in semi-kutcha and kutcha houses are comparatively poor, their family size is bigger and here rural immigrants as job seekers also get shelter (also refer to bar diagram).

In rural India the largest per capita, i.e. 15 m^2 and above, covered area of kutcha houses are in Arunachal Pradesh 73.0 m^2 , Mizoram 40.1 m^2 , Gujarat 32.2 m^2 , Manipur 29.5 m^2 , Uttar Pradesh 17.3 m^2 and Madhya Pradesh 15.5 m^2 . In urban areas per capita covered area of kutch houses are in

Table 6 : Per Capita Covered Area (M^2) by Type of Structure in Rural/Urban Areas of India

State/Union Territories	Kutcha		Semi-Pucca		Pucca		All Cat.	
	R	U	R	U	R	U	R	U
Andhra Pradesh	13.9	6.1	56.5	9.6	39.3	10.9	32.7	9.5
Assam	13.6	18.7	15.6	13.5	26.5	16.5	14.6	16.5
Bihar	12.1	7.7	17.5	8.8	23.8	15.4	15.0	12.0
Gujarat	32.2	5.9	41.3	8.2	41.2	10.2	38.0	9.3
Haryana	6.4	3.2	10.8	5.5	14.6	13.4	12.5	11.0
Himachal Pradesh	10.1	5.5	13.3	22.7	11.0	11.3	12.1	12.9
Jammu & Kashmir	8.9	9.2	8.8	8.0	18.2	9.4	10.9	9.0
Karnataka	8.6	5.7	10.5	6.7	12.8	10.0	10.4	8.0
Kerala	6.1	7.2	8.9	9.4	14.2	17.0	10.4	13.6
Madhya Pradesh	15.5	8.3	18.7	9.6	53.2	14.2	21.0	11.9
Maharashtra	6.5	5.6	8.3	6.3	12.7	9.5	8.5	7.5
Manipur	29.5	10.1	10.6	9.1	6.4	7.2	23.1	9.4
Meghalaya	8.6	6.5	5.4	8.3	5.7	8.2	7.2	7.9
Nagaland	N.A.	11.0	N.A.	9.0	N.A.	9.1	N.A.	9.4
Orissa	6.6	6.5	7.8	7.6	9.9	10.6	7.0	8.3
Punjab	5.0	4.8	7.1	7.7	13.7	10.8	10.4	10.0
Rajasthan	8.2	5.2	12.9	8.7	11.0	8.4	10.1	8.1
Sikkim	9.7	2.4	4.7	3.4	4.4	3.9	5.9	3.6
Tamil Nadu	4.6	3.8	6.2	5.4	8.8	7.4	6.1	7.2
Tripura	5.9	6.2	6.9	7.9	12.9	10.7	6.0	7.0
Uttar Pradesh	17.3	6.8	13.3	7.6	13.0	10.0	15.0	8.9
West Bengal	*	11.0	*	7.2	*	10.2	*	9.6
Andaman & Nico.	6.2	5.9	6.1	8.0	15.4	8.9	7.8	8.3
Arunachal Pd.	13.0	21.5	21.5	20.1	46.4	32.8	53.9	25.1
Chandigarh	4.9	4.0	4.3	3.1	20.6	9.1	12.7	9.0
Dadar & Nagar H.	5.1	N.A.	4.6	N.A.	12.9	N.A.	5.6	N.A.
Delhi	-	4.0	16.2	8.8	13.4	12.1	13.9	11.8
Goa, Daman & Diu	9.2	6.4	14.5	10.9	13.3	16.5	13.4	14.5
Lakshadweep	7.7	8.7	11.4	15.8	12.1	14.9	11.5	14.9
Mizoram	40.1	11.7	9.7	9.1	-	9.4	24.8	9.4
Pondicherry	3.4	5.8	4.4	7.4	9.7	14.1	5.2	9.5
All India	39.2	6.8	33.9	7.6	26.3	10.9	34.8	9.4

Source : Sarvekshna, 52nd Issue, Vol.XVI, No.1, July-September, 1992, NSS - 43rd Round (Surveyed in July 1987 - June 1988).

* Figures are unbelievably high, thus it could not be considered for analysis

Arunachal Pradesh 21.5 m^2 , Assam 18.7 m^2 and rest of the States/UTs have only between 2.4 m^2 to 11.7 m^2 . Per capita large covered area of semi-pucca houses are in Andhra Pradesh 56.5 m^2 , Gujarat 41.3 m^2 , Arunachal Pradesh 21.5 m^2 , Madhya Pradesh 18.7 m^2 , Bihar 17.5 m^2 , Delhi 16.2 m^2 and Assam 15.6 m^2 . Whereas per capita covered area semi-pucca houses in urban areas are in Himachal Pradesh 22.7 m^2 , Arunachal Pradesh 20.1 m^2 and Lakshadweep 15.8 m^2 , which is maximum. Highest per capita covered area of pucca houses in rural areas are in Madhya Pradesh 53.2 m^2 , Arunachal Pradesh 46.3 m^2 , Gujarat 41.2 m^2 , Andhra Pradesh 39.3 m^2 , Assam 26.5 m^2 , Bihar 23.8 m^2 , Chandigarh 20.6 m^2 , Jammu and Kashmir 18.2 m^2 and Andaman and Nicobar 15.4 m^2 . Whereas in urban areas highest per capita covered areas of pucca houses are in Arunachal Pradesh 32.8 m^2 , Kerala 17.0 m^2 , Assam 16.5 m^2 and Bihar 15.4 m^2 .

4.2 Room Occupancy

In India the majority of households occupy the minimum size of accommodation. About 40.5 per cent households live in one room houses, 30.6 per cent in two room houses, 13.8 per cent in three room houses and 7.1 per cent in four room houses and rest with unspecified room houses. Among the Scheduled Castes and Scheduled Tribes the situation is worst as 48.4 per cent Scheduled Castes and 50.8 per cent Scheduled Tribes live in one room houses, 30.9 per cent Scheduled Castes, 30.8 per cent Scheduled Tribes in two rooms, 10.7 per cent Scheduled Castes, 10.4 per cent Scheduled Tribes in

three room houses, 4.7 per cent SC, 3.9 per cent ST in four room houses. The following Table 7 shows that the situation among the Scheduled Castes and Scheduled Tribes is worst in urban areas whereas among Scheduled Tribes in rural areas.

Table 7: Percentage of Households Occupying Rooms in India

Population	One Room	Two Rooms	Three Rooms	Four Rooms
<u>Total :</u>				
Overall	40.5	30.6	13.8	7.1
Scheduled Castes	48.4	30.9	10.7	4.7
Scheduled Tribes	50.8	30.8	10.4	3.9
<u>Rural :</u>				
Overall	40.8	30.7	13.5	6.9
Scheduled Castes	48.1	31.0	10.8	4.7
Scheduled Tribes	51.3	30.8	10.3	3.8
<u>Urban :</u>				
Overall	39.6	30.4	14.8	7.8
Scheduled Castes	59.8	30.3	10.4	4.7
Scheduled Tribes	46.2	31.8	11.5	4.7

Source : Calculated from Table on Houses and Household Amenities, Census of India, Series I, Part VII, 1991.

The worst condition of rural living is observed in five states/UTs where one room occupying households are more than 50 per cent, e.g. Tripura 67.7, Maharashtra 63.6, West Bengal 57.2, Pondicherry 55.9 and Tamil Nadu 53.0 per cent. Their details are given in Table 8.

Among the well-off States/UTs which have less than 25 per cent rural households living in one room tenement are

Table 8 : Percentage of Households Occupying Rooms in States/Union Territories

State/UTs			One Room	Two Rooms	Three Rooms	Four Rooms
<u>Worst Condition of Living</u>						
Tripura	:	Total	67.7	22.2	6.6	2.0
		Rural	68.6	21.9	6.3	1.9
		Urban	63.3	23.9	8.2	2.7
West Bengal	:	Total	63.6	22.3	6.7	2.2
		Rural	65.7	20.8	5.1	1.5
		Urban	60.1	24.7	9.0	3.4
Pondicherry	:	Total	57.2	26.6	8.2	4.7
		Rural	54.0	25.5	6.1	1.9
		Urban	57.1	22.3	8.5	4.0
Tamil Nadu	:	Total	53.0	29.8	10.3	4.2
		Rural	57.9	28.8	8.2	3.1
		Urban	42.6	31.9	14.7	6.5
<u>Good Condition of Living</u>						
Lakshadweep	:	Total	8.4	23.8	26.7	19.4
		Rural	8.0	24.9	29.8	21.3
		Urban	8.8	22.9	24.1	17.8
Kerala	:	Total	12.1	26.8	24.5	16.6
		Rural	12.7	27.7	24.5	16.0
		Urban	10.2	23.9	24.5	18.3
Manipur	:	Total	16.8	30.1	28.5	14.5
		Rural	17.7	32.3	28.0	13.5
		Urban	14.4	24.0	29.8	17.4
Nagaland	:	Total	22.0	38.6	22.4	10.0
		Rural	20.1	40.3	23.2	10.0
		Urban	28.7	32.6	19.4	10.1

Source : Calculated from Table on Houses and Household Amenities, Census of India, Series I, Part VII, 1991.

Lakshadweep 8.4, Kerala 12.1, Manipur 16.8 and Nagaland 22.0. Except Lakshadweep and Kerala, the proportion of urban households occupy one room tenement is comparatively higher.

More than 65 per cent rural Scheduled Castes households occupying one room tenement are in Chandigarh 81.0 R., Tamil Nadu 69.6 R., Maharashtra 69.6 R. and 66.6 U., Pondicherry 67.7 U. and West Bengal 65.8 R. per cent. Among the rural Scheduled Tribes household occupying one room by more than 65 per cent households are in Goa 88.5 R., Tripura 79.4 R. and 72.7 U., Tamil Nadu 76.2 R., Maharashtra 74.8 R., Andaman and Nicobars 68.8 R., Gujarat 66.6 R., Daman and Diu 66.3 R., West Bengal 65.6 R. and Andhra Pradesh 65.3 R. per cent.

Comparatively least concentration of Scheduled Castes in one room tenements is in Arunachal Pradesh 17.4 R., Manipur 20.3 R., 22.3U., Kerala 26.3 R., 24.5 U. and Daman and Diu 22.0 U. per cent. Among Scheduled Tribes concentrations in one room set is least in Arunachal Pradesh 26.9 U., Assam 23.3 U. Kerala 21.2 U., Manipur 22.0 R., 19.6 U., Meghalaya 26.0 U., Mizoram 21.3 U., Nagaland 20.1 R., 22.8 U., Sikkim 24.8 R., 27.2 U. and Lakshadweep 7.8 R., 6.9 U. per cent.

5. HOUSING REQUIREMENT

India has only 30.96 per cent and 73.19 per cent houses as pucca in rural and urban areas respectively and majority of the households live in one room accommodation. But we

Table 9 : Acute Housing Shortage, 1991

State/Union Territories	SHORTAGE OF HOUSES			
	RURAL		URBAN	
	No. of Houses	Percentage	No. of Houses	Percentage
Pondicherry	6085	11.09	8702	9.38
Arunachal Pradesh	14995	11.09	584	2.36
Bihar	1038876	9.33	140072	8.26
Dadar & Nagar Haveli	1176	5.21	548	28.50
Orissa	334192	6.91	34821	4.37
Daman & Diu	585	6.33	439	4.98
Uttar Pradesh	680382	3.92	287825	7.08
Goa	6277	4.85	3819	4.02
Haryana	60152	3.30	42472	6.16
Delhi	1577	0.10	70940	4.36

Source : Calculated from Table on Houses and Household Amenities, Census of India, Series I, Part VII, 1991.

can't think for the improvement of quality as yet as we already have acute shortage of 5.00 million or 3.40 per cent houses in the country which needs priority.⁹ The shortage of houses in rural areas is about 3.65 million or 3.38 per cent. The above Table 9 shows the acute shortage of houses in different states and Union Territories.

9. According to NSS 44th Round (July 88-June 1989), Report No.376 in rural India the percentage of bad condition of dwellings are in pucca 4.08, Semi pucca 13.42 and kutcha 41.88 in rural areas, whereas in urban areas they are pucca 4.60, semi pucca 22.99 and kutcha 55.71.

However, there are major states which somehow do not emerge in terms of percentage for house shortage where house shortage is above one lakh, Andhra Pradesh 322,963 R., 139,920 U., Maharashtra 299,855 R., 151,423 U., Madhya Pradesh 282,161 R., West Bengal 135,575 R. and Karnataka 126,399 R.

6. HOUSING RELATED FACILITIES

Basic housing related facilities like drinking water, toilet and electricity are the most essential requirements for today's India. Other facilities like telephone, air-conditioning are the dreams even for the well to do masses.

6.1 Drinking Water Facility

In India households with drinking water generally with pipe tap within the premises are 32.1 per cent, whereas 23.2 per cent in rural and 60.3 per cent in urban areas. In India, where the Scheduled Castes and Scheduled Tribes live, the availability of drinking water within the premises is only 20.0 per cent and 13.0 per cent respectively. In rural India, drinking water within the premises of SC and ST households are 15.6 per cent and 10.8 per cent respectively, whereas in urban areas the proportions are 39.9 per cent and 36.15 per cent respectively. Table 10 shows the State/UTs wise rural and urban percentage of households with water facility within their premises. The highest proportion of households with drinking water facilities within their premises (rural and

Table 10 : Percentage of Households with Drinking Water Within their Premises

State/UTs	Total	State/UTs	S.C.	State/UTs	S.T.
<u>Highest (Rural) 60>%</u>			40>%		30>%
Lakshadweep	92.5	Punjab	69.4	Lakshadweep	92.7
Punjab	78.3	Delhi	55.1	Sikkim	56.2
Delhi	68.3	Kerala	47.0	Kerala	46.4
Kerala	65.8	Dadar & Nagar Haveli	47.0	Assam	34.8
		Sikkim	42.1	U.P.	31.8
				Goa	30.8
<u>Lowest (Rural) <15%</u>			<10%		<10%
Mizoram	4.2	Karnataka	3.1	A.P.	3.5
Tamil Nadu	9.7	Mizoram	4.1	Mizoram	4.2
Karnataka	10.3	Pondicherry	5.7	Tamil Nadu	4.3
Rajasthan	12.5	A.P.	6.5	Rajasthan	4.4
M.P.	13.2	M.P.	7.9	Bihar	6.2
A.P.	14.0	Rajasthan	8.9	Karnataka	6.2
Orissa	14.4	Orissa	9.5	Orissa	6.8
Daman & Diu	14.5			West Bengal	7.5
				Daman & Diu	7.6
				M.P.	8.7
<u>Highest (Urban) 70>%</u>			50>%		50>%
Punjab	90.5	Punjab	81.2	Sikkim	81.9
Chandigarh	82.2	Dadar & Nagar Haveli	74.1	Lakshadweep	69.8
Sikkim	77.2	Assam	62.5	Uttar Pradesh	62.8
Dadar & Nicobar Island	74.9	Gujarat	61.8	Assam	62.6
Delhi	74.8	Chandigarh	57.5	Arunachal Pd.	61.6
Andaman & Nicobar Island	74.3	Sikkim	54.0	Tripura	59.9
		Uttar Pradesh	52.1	Himachal Pd.	59.5
		Meghalaya	51.7	Nagaland	54.7
		Delhi	50.7	Kerala	52.7
<u>Lowest (Urban) <60%</u>			<30%		<30%
Mizoram	17.6	Daman & Diu	14.1	Daman & Diu	14.7
Daman & Diu	32.6	Tamil Nadu	19.3	Mizoram	17.2
Manipur	34.1	Karnataka	22.8	Orissa	20.8
Karnataka	47.4	Manipur	23.2	Andhra Pd.	21.6
Andhra Pd.	47.4	Orissa	23.5	Madhya Pd.	25.0
Orissa	47.7	Madhya Pd.	26.3	Manipur	26.2
Tamil Nadu	48.9	Mizoram	27.1	Karnataka	27.2
				Goa	28.6

Source : Calculated from Table on Houses and Household Amenities, Census of India, Series I, Part VII, 1991.

urban combined) is in Punjab 82.0 per cent and lowest in Mizoram 10.6 per cent as a whole, which represent almost the head and tale of the overall development order.

Among the States/UTs, four are on the top where more than 65 per cent rural households have drinking water facility within their premises, they are Lakshadweep 92.5, Punjab 78.3, Delhi 68.3 and Kerala 65.8 per cent. The worst served states/UTs are Mizoram, Tamil Nadu, Karnataka, Rajasthan, Madhya Pradesh, Andhra Pradesh, Orissa and Daman and Diu, where less than 15 per cent rural households are provided drinking water within their premises. In urban areas the highest served states/UTs are Punjab 90.5, Chandigarh 82.2, Sikkim 77.2, Dadar and Nagar Haveli 74.9, Delhi 74.8 and Andaman and Nicobar Islands 74.3 per cent. The lowest percentage, i.e. less than 50 per cent of urban households with drinking water supply within the premises are in Mizoram 17.6, Daman and Diu 32.6, Manipur 34.1, Karnataka 47.4, Andhra Pradesh 47.4, Orissa 47.7 and Tamil Nadu 48.9 per cent. Among the down-trodden, i.e. SC and ST the availability of drinking water within the premises is least in comparison to overall population as highlighted in Table 10.

The above analysis reveals that more than tow-thirds rural households do not have drinking water facility within their premises and they have to waste a lot of time to fetch water from far-off places. In our study we found that the time duration for fetching water from different sources was

between half an hour to five hours. Its answer is not only in mismanagement of water supply but also drying the water sources due to ineffective environmental policies.

6.2 Toilet

Toilet is one of the most important aspect of housing. In India only 26.7 per cent households avail toilet facility within their premises. In rural India the proportion is too less, i.e. only 11.4 per cent, whereas in urban it is 66.1 per cent. In fact in rural areas it is a part of tradition and culture that people prefer to defecate in their fields from hygienic and environmental point of view. But it becomes a great problem when people migrate to urban areas where space is limited and as per their habit they still continue defecating on road and railway sides and making the conditions like slums. Sulabh Sauchalaya (Community Latrine) is the answer, as they are quite successful wherever they are made available to public.¹⁰ Table 11 shows the sharp contrast in various states/UTs.

The states/UTs where more than 40 per cent rural households use their toilets at home are Lakshadweep 81.7, Tripura 63.1, Mizoram 60.7, Kerala 46.0 and Arunachal Pradesh 41.9. In fact among all these states the impact of westernisation through Christian Missionaries is an important

10. Sulabh Sauchalaya (community latrine) are successfully launched in India by NGO, mostly in big cities. Public pays a nominal amount for its use.

Table 11: Percentage of Households with Toilet Facility
Within Their Premises

State/UTs	Total	State/UTs	S.C.	State/UTs	S.T.
<u>Highest (Rural) 40%></u>			30%>		30%>
Lakshadweep	81.7	Tripura	73.0	Lakshadweep	81.8
Tripura	63.1	Mizoram	53.3	Mizoram	60.2
Mizoram	60.7	Arunachal P.	46.4	Arunachal P.	41.2
Kerala	46.0	Meghalaya	32.4	Tripura	36.5
Arunachal P.	41.9	Manipur	32.1	Sikkim	31.2
<u>Lowest (Rural) < 5%</u>			< 2%		< 2%
M.P.	3.7	Chandigarh	1.8	Goa	0.5
Orissa	4.0	M.P.	1.9	Orissa	0.7
Chandigarh	4.7	Orissa	1.9	Rajasthan	0.9
				M.P.	1.0
				Bihar	1.0
				A.P.	1.4
<u>Highest (Urban) 80%></u>			70%>		80%>
Tripura	96.5	Tripura	92.7	Tripura	94.8
Assam	86.3	Mizoram	90.7	Mizoram	84.9
Meghalaya	85.7	Assam	78.6	Meghalaya	83.3
Mizoram	82.9	Dadar & Nagar	77.0	Sikkim	82.4
Chandigarh	82.1	Haveli			
		Meghalaya	71.1		
<u>Lowest (Urban) < 60%</u>			< 30%		< 30%
Daman & Diu	45.3	Orissa	21.3	Goa	1.9
Orissa	51.1	Pondicherry	24.3	Daman & Diu	11.1
Pondicherry	52.1	Madhya Pradesh	24.8	Dadar & Nagar-	14.8
Goa	54.3	Haryana	25.2	Haveli	
Madhya Pd.	54.9	Daman & Diu	26.2	Orissa	16.3
Andhra Pd.	56.4	Andhra Pd.	29.5	Madhya Pd.	21.6
Tamil Nadu	59.2			Andhra Pd.	26.4
Bihar	59.4				

Source : Calculated from Table on Houses and Household Amenities, Census of India, Series I, Part VII, 1991.

factor and among the SC and ST population, the impact is quite high. The lowest i.e. less than 5 per cent households using their toilets in rural areas are in Madhya Pradesh 3.7, Orissa 4.0 and Chandigarh 4.7. States/UTs where less than 2 per cent SC households use their toilets are Chandigarh 1.8, Madhya Pradesh 1.9 and Orissa 1.9, whereas ST households are in Goa 0.5, Orissa 0.7, Rajasthan 0.9, Madhya Pradesh 1.0, Bihar 1.0 and Andhra Pradesh 1.4. All the above states/UTs have least impact of Christian Missionaries (See Table 11).

In the states/UTs where more than 80 per cent urban households use their toilets are Tripura 96.5, Assam 86.3, Meghalaya 85.7, Mizoram 82.9 and Chandigarh 82.1. The Scheduled Caste households of urban areas using their toilets is maximum in Tripura 92.7, Mizoram 90.7, Assam 78.6, Dadar and Nagar Haveli 77.0, Meghalaya 71.1. Also the highest proportion among Scheduled Tribes using their toilets in urban areas is in Tripura 94.8, Mizoram 84.9, Meghalaya 83.3 and Sikkim 82.4 per cent.

In the States/UTs where the least, i.e. less than 60 per cent urban households using their toilets are Daman and Diu 54.3, Orissa 51.1, Pondicherry 52.1, Goa 54.3, Madhya Pradesh 54.9, Andhra Pradesh 56.4, Tamil Nadu 59.2 and Bihar 59.4. Among the households of Scheduled Castes of urban areas using their toilets is lowest in Orissa 21.3, Pondicherry 24.3, Madhya Pradesh 24.8, Haryana 25.2, Daman and Diu 26.2 and Andhra Pradesh 29.5 per cent. Whereas the lowest proportion

of Scheduled Tribes households using their toilets is in Goa 1.9, Daman and Diu 11.1, Orissa 16.3, Madhya Pradesh 21.6 and Andhra Pradesh 26.4 per cent.

6.3 Electricity

Electricity is one of the most important facility in the households and no house without electricity is now considered complete. Besides lighting, our day to day activities of the family depend upon electricity. Our country is bigger in size as well as in population but the sources and production of electricity are limited and the result is that in India only 45.7 per cent households are provided with electricity. In rural and urban areas the gap is too much as only 33.1 per cent rural households are with electricity, whereas in urban areas the proportion is more than double, i.e. 78.1 per cent. There is an extreme regional variation throughout the country, which also correlates with the poverty and affluence reflecting the socio-economic and cultural status of the society. Here it is worth to mention that it is not necessary that the households with electric connections are enjoying the continuous electric supply especially in small towns and villages. The shortage of electric generation is the main reason of scarcity and in fact it is the main hurdle for India's uniform regional development. However, the following table 12 depicts the unproportionate distribution pattern of electricity at household level.

Table 12: Percentage of Households with Electricity

State/UTs	Total	State/UTs	S.C.	State/UTs	S.T.
<u>Highest (Rural)</u> 60>%			60>%		50>%
Lakshadweep	98.6	Daman & Diu	96.9	Lakshadweep	98.9
Daman & Diu	93.9	Himachal P.	82.7	Daman & Diu	83.0
Himachal P.	87.5	Dadar & Nagar		Himachal P.	72.5
Goa	63.3	Haveli	81.8	Sikkim	66.5
Punjab	79.7	Goa	74.9	Nagaland	50.7
Chandigarh	68.9	Punjab	66.4	Andaman & Nic.	50.3
Haryana	66.7	Gujarat	61.2		
Delhi	64.6	Delhi	60.6		
<u>Lowest (Rural)</u> <20%			<20%		<10%
Bihar	6.2	Bihar	4.3	Goa	1.3
U.P.	12.6	U.P.	7.1	Bihar	3.0
Assam	13.0	Assam	11.9	Assam	6.0
West Bengal	18.4	West Bengal	13.0	Orissa	6.1
Meghalaya	18.4	Orissa	13.1	Rajasthan	8.2
		Rajasthan	16.7	West Bengal	8.6
<u>Highest (Urban)</u> 90>%			80>%		80>%
Lakshadweep	99.4	Daman & Diu	98.9	Sikkim	96.0
Him. Pradesh	96.7	Dadar & Nagar-		Him. Pradesh	94.6
Daman & Diu	96.0	Haveli	93.7	Arun. Pradesh	89.2
Punjab	95.3	Him. Pradesh	94.6	Tripura	87.0
Sikkim	93.2	Punjab	88.4	Mizoram	86.4
Andaman & Ni.	91.0	Mizoram	85.2	Andaman & Nico.	84.2
Haryana	90.6	Meghalaya	81.9	Meghalaya	80.5
		Sikkim	81.8	Manipur	80.1
<u>Lowest (Urban)</u> <70%			<50%		<50%
Bihar	60.6	Kerala	36.1	Goa	4.0
Orissa	64.6	Orissa	36.3	Orissa	28.1
Assam	65.0	Bihar	43.1	Andhra Pradesh	40.9
Uttar Pradesh	68.9	Tamil Nadu	47.3	Bihar	43.9
Kerala	69.0	West Bengal	48.2	Kerala	46.0
				Madhya Pradesh	47.8

Source : Calculated from Table on Houses and Household Amenities, Census of India, Series I, Part VII, 1991.

The above Table 12 reveals that except the states of Punjab and Haryana none of the populous states come under the highest rural 60% or urban 90% categories rather they fall in the lowest rural <20% or urban <70% categories or in between. In India the general feature is that the proportion of households enjoying the electricity (in terms of connection and supply) is according to the hierarchy of settlements. Therefore, the households in metropolitan cities enjoy maximum than the other smaller towns or villages where proportion goes down to even nil. Scheduled Tribes are comparatively well off in all those States/UTs where they are dominant in number and they have their own government. In other states/UTs where they live as a minority, they fall under the least rural and urban categories. Scheduled Castes who are generally dispersed through out the country than the STs, are better off than STs.

7. CONCLUSION

India being the seventh in area and second largest populated country of the world faces an acute shortage and worst condition of housing. About 18.5 per cent rural and 13.1 per cent urban households suffer with flood risk of their buildings. In rural India about 37.5 per cent and urban India about 17.7 per cent households do not have any approach road to their buildings. About 6.3 per cent rural and 14.7 per cent urban households live in slum/bustee areas,

when these figures are far below than the truth. In rural areas average size-wise per capita kutcha, semi-pucca and pucca structures are 39.2, 33.9 and 26.3 square metres, whereas in urban areas it is only 6.8, 7.6 and 10.9 square metres respectively. About 40.8 per cent rural households live in one room set in India, whereas 48.14 per cent Scheduled Castes and 50.8 per cent Scheduled Tribes households live in one room set. Only 7.1 per cent households live in four rooms set when only 4.7 per cent and 3.9 per cent households of Scheduled Castes and Scheduled Tribes live in four rooms set respectively. Worst states are Tripura, West Bengal, Pondicherry and Tamil Nadu where more than 50 per cent rural households live in one room set. In rural India about 5,000,000 houses are urgently required for houseless households who are compelled to huddle with others. Only Uttar Pradesh requires 1,000,000 houses. The quality of living is yet to be the next priority that about 70 per cent rural and 30 per cent urban houses are either kutcha or semi-pucca, whereas a little less than half of the humanity clogs in one room set.

In India only 32.1 per cent households have tap water within their premises, which is 23.2 and 60.3 per cent in rural and urban areas respectively. Only 26.7 per cent houses have toilet facility within the premises, whereas in rural areas it is only 11.4 per cent and in urban 66.1 per cent. Only about 45.7 per cent of Indian households have electricity connections, with only 33.1 per cent in rural

areas and 78.1 per cent in urban areas. On an average only half of the time electricity is available for industrial or domestic purposes, which is due to short sighted planning that also on paper only.

Even after half a century of Independence and yet prevailing almost inhuman habitat situation the question is 'can Indian society would ever be able to equate socially or economically with the other advanced societies of the world?' Unless the entire outlook, policies and planning towards human habitat is not changed we can't expect anything good in the existing system. Since geographical, social and economic conditions of the country are unique, therefore, new innovations for viable housing material is inevitable. Housing has to be declared as industry and government's role should be limited to only sight and services rather than allowing the development authorities to construct spurious and costly houses mainly to meet their personal benefits.